Amendments to the Claims

Claim 1 (Previously presented): A method of transmitting data using pulse modulation, the method comprising:

receiving bits of data from a memory unit;

transforming a plurality of the bits of data into an ultra wideband pulse, the ultra wideband pulse having a pulse duration selected from a set of ten predetermined pulse durations, one of which is corresponding to the plurality of bits of data; and

transmitting the ultra wideband pulse over a guided medium to a receiver without using a carrier signal to transmit the ultra wideband pulse;

wherein each of the pulse durations within the set of ten predetermined pulse durations corresponds to one of integers 0 through 9.

Claim 2 (Cancelled).

Claim 3 (Original): The method of claim 1 wherein the data is in the form of universal character encoding.

Claim 4 (Previously presented): The method of claim 1 further comprising:

receiving the ultra wideband pulse from the guided medium at the receiver; and

transforming the ultra wideband pulse into the plurality of bits of data corresponding to the durations of the ultra wideband pulse.

Claims 5-61 (Cancelled).

Claim 62 (Previously presented): A method of transmitting data, comprising:

representing a symbol encoding a plurality of bits of data using a pulse characteristic of a single time modulated ultra wideband radio-frequency pulse;

transmitting the single time modulated ultra wideband radio-frequency pulse over a guided medium from a transmitter to a receiver;

wherein the step of representing comprises encoding the plurality of bits into a base 10 representation, such that the single time modulated ultra wideband pulse corresponds to a digit between 0 and 9.

Claim 63 (Previously presented): The method of claim 62 wherein guided medium is an electrically conductive guided medium.

Claim 64 (Previously presented): The method of claim 62 wherein the pulse characteristic is a pulse duration.

Claim 65-66 (Cancelled).

Claim 67 (Previously presented): A method of transmitting data, comprising:

representing a character with a numeric base-10 character code;

transforming each digit of the numeric base-10 character code into an ultra wideband pulse, the ultra wideband pulse having a pulse duration selected from a set of ten predetermined pulse durations, one of which is corresponding to the digit; and

transmitting the ultra wideband pulse over a guided medium to a receiver without using a carrier signal to transmit the ultra wideband pulse; and

wherein each of the pulse durations within the set of ten predetermined pulse durations corresponds to one of integers 0 through 9.